

REMARKS

Claims 1-17 are currently pending in connection with the present application. Claims 1, 4, 10 and 14 are independent claims. By this amendment, claim 1 has been amended in a minor fashion for clarity, no claims were added, and there is no new matter. Applicants traverse the rejection set forth in the Office Action dated July 7, 2005.

ENTRY OF AMENDMENT

Entry of this Amendment after final for reconsideration is respectfully requested, since it raises no new issues requiring further consideration or search by the Examiner. Specifically, the only amendment made is a clarifying amendment to claim 1, which does not raise any new issues requiring further consideration and/or search.

DRAWINGS

The Examiner has neither accepted nor objected to the Applicants' drawings. It is presumed that the drawings are acceptable. However an indication of such is respectfully requested.

PRIOR ART REJECTIONS

35 U.S.C. §102 Coll Rejection

Claims 1-17 stand rejected under 35 U.S.C. §102(e) as being anticipated by Coll et al. (U.S. Pre-Grant Publication No. 2003-0213246). Applicants respectfully traverse.

Fig. 1 of Coll discloses a microprocessor-based system for producing thermal heat and electrical power intended to provide domestic electrical power, domestic space heating and

domestic hot water. One of the primary heating loops circulates an organic working fluid (i.e., hydrocarbons or halocarbon refrigerants) through a loop defined by expander 101, condenser 102, feed pump 103, and evaporator 105.¹ Power generated by passing the organic working fluid through expander 101 drives generator 108 to produce electricity.² The working fluid may flow through the desuperheater 106 to reduce the temperature of the working fluid, if necessary.³ The organic working fluid then flows through condenser 102 and is used to heat an external heating loop 112.⁴ External heating loop 112 contains a hydronic fluid (e.g., water) and includes a hot water pump 113, which serves to circulate hot water to a hot water heater, and may be used to heat radiators in space 111. Various sensors (S_n) and valves (A_n) serve to monitor and adjust the thermal and electrical output of the system.⁵

With respect to claim 1, Applicants submit that Coll does not disclose at least “evaluating a mass flow, a forward flow temperature, and a return flow temperature of the medium to be heated, with respect to the heating condenser”. In the condensing portion of the Coll system, the organic working fluid passing through condenser 102 is used to heat the external heating loop 112. Claim 1 of Coll recites “at least one **heating condenser** for the generation of distance heat, through which a **medium to be heated** flows from the secondary side”. Therefore, reading Coll on claim 1 would necessarily require that the **medium to be heated corresponds** to the working fluid, because “secondary side” is a term of art referring to the condensing end of a heating unit.

¹ Coll, Figure 1 and paragraph [0024].

² Coll, paragraph [0027].

³ Coll, paragraph [0026].

⁴ Coll, paragraph [0028].

⁵ Coll, paragraph [0036] – [0038] and Table 2.

Coll does not teach measuring “**a mass flow, a forward-flow temperature, and a return-flow temperature” of the organic working fluid** “with respect to the heating condenser”. Coll only teaches measuring the expander output temperature (S_{12}) occurring **a number of steps before** the working fluid enters the condenser and measuring the feed pump inlet temperature (S_6) **a number of steps after** the working fluid exits the condenser.

With respect to the condenser itself, Coll only teaches **measuring the internal pressure** of the condenser (S_9). The **only** flows measured by the Coll system include the gas flow (S_{11}) and the hydronic fluid flow (S_{19}). The **only temperature measured entering and leaving the condenser is the temperature values of the incoming and outgoing hydronic fluid** (S_1) and (S_2).

Thus, Coll does not evaluate “**a mass flow, a forward-flow temperature, or a return-flow temperature of the medium to be heated**” as Coll does not need to know the mass flow, because Coll provides a feed pump 103 which pumps the organic working fluid through the entire primary loop of the system at a set rate.

Furthermore, Coll also fails to teach “**determining at least one desired power output value** … from at least **one first desired value**, including an electric power output … and from a **second desired value**, including a distance heat power output” and “**determining a second desired power output value** by evaluating a mass flow, a forward flow temperature, and a return flow temperature of the medium to be heated” as recited in claim 1. More specifically, even though Coll makes the general statement that the listed parameters will be necessary for controlling the system, Coll **does not teach exactly which combination of parameters** would

be necessary to obtain “a first desired output level” or “second desired output level” as claimed in independent claim 1.⁶

Accordingly, Applicants submit that Coll does not teach, suggest, or render obvious the features of claim 1.

For reasons somewhat similar to the reasons set forth above regarding claim 1, Coll does not teach, suggest, or render obvious “A device, … a computing unit, adapted to determine the second desired value upon being supplied with at least the following quantities of the medium to be heated, with respect to the heating condenser,

a mass flow,

a forward-flow temperature, and

a return-flow temperature.” as recited in claim 4.

For reasons somewhat similar to the reasons set forth above regarding claim 1, Coll does not teach, suggest, or render obvious “A method..., comprising:

determining a second desired power output value from a mass flow, a forward-flow temperature and return-flow temperature of a medium to be heated flowing...” as recited in claim 10.

For reasons somewhat similar to the reasons set forth above regarding claim 1, Coll does not teach, suggest, or render obvious “A device...comprising:

means for determining a second desired power output value from a mass flow, a forward-flow temperature and return-flow temperature of a medium to be heated flowing...” as recited in claim 14.

⁶ Coll, paragraph [0037].

Finally, Applicants submit that claims 2-4, 5-9, 11-13 and 15-17 are also patentable because they depend on independent claims 1, 4, 10, or 14.

Therefore, Applicants respectfully request that the outstanding rejection be withdrawn.

CONCLUSION

Accordingly, in view of the amendments and remarks, reconsideration of all outstanding objections and rejections and allowance of each of claims 1-17 in connection with the present application is earnestly solicited.

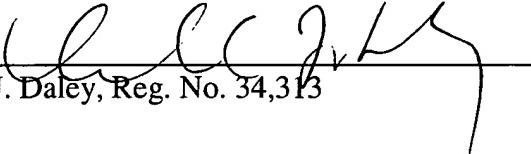
Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), Applicant(s) hereby petition(s) for a two (2) month extension of time for filing a reply to the outstanding Office Action and submit the required \$450.00 extension fee herewith.

If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the telephone number listed below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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